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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,006	01/20/2004	Toshinori Nagahashi	118385	6839

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EXAMINER	
AMINI, JAVID A	
ART UNIT	**PAPER NUMBER**
2628	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/759,006	NAGAHASHI ET AL.	
	Examiner	Art Unit	
	JAVID A. AMINI	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/19/2008 has been entered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 6 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 6 define a computer-executable program stored in a readable storage medium …. The specification on page 20 lines 15-25 teaches that the computer-readable medium indicates recording devices, and the computer readable medium at line 21 indicates a transmitting wave. While "functional descriptive material" may be claimed as a statutory product (i.e., a "manufacture") when embodied on a tangible computer readable medium, a transmitting wave embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki Pub. No. US 2002/0048413 A1, Tsai et al. Pub. No. US 2003/0002733 A1, hereinafter Tsai, and further in view of Janko et al. 5,940,124, hereinafter Janko.

Claim 1.

Kusunoki at [0002] teaches an image editing device for trimming an image, that relates to an image system for forming an image on the basis of image data entered into imaging system. Kusunoki at [0113] teaches a noticing area calculating section (i.e. the display area 88 shown in fig. 6) that calculates a noticing area of an image which is an object for a trimming operation,

Kusunoki and Tsai do not explicitly specify the calculation of the noticing area being at least partially based on at least one noticing degree parameter of the image;

However, Janko in fig. 1B illustrates the calculation of the noticing area (i.e. similar to #18) being at least partially based on at least one noticing degree parameter of the image (i.e. similarly 10A, also in col. 4 lines 19-27, the noticing area is similarly as Janko disclosed it in his work as attentional maps).

Kusunoki in fig. 6 teaches a trimming rule designating section (i.e. the display area designated with number 38) that designates a trimming method for trimming the noticing area of

the image which is the object for the trimming operation, and designates a trimming scope (i.e. in display area of 88). Kusunoki at [0089] and in figs. 10 teaches a trimming shape designating section that designates an arbitrary shape (Kusunoki at [0091] teaches selection of different templates in a reduce size) an arbitrary of a trimming scope when the designating operation of the trimming scope is selected by the trimming rule designating section. Kusunoki at [0110] teaches the image data and the templates data are stored which is used for the trimming operation among a template group which is memorized in advance when a using operation for the template is designated by the trimming rule designating section.

Kusunoki at [0122] teaches that the operator may adjust the first display area 38 to have a new aspect ratio corresponding to the aspect ratio of the template 84, but

Kusunoki does not explicitly specify (*see underlined features*) a noticing area (i.e. the first display area 38) error calculating section (*Examiner interpreted it as an adjusting section not as an error calculating section*) that calculates a distribution ratio of the noticing area in the trimming scope or the template (i.e. the template 84), and according to the distribution ratio of the noticing area calculated by the noticing area calculating section, the image adjustment including enlarging (e.g., in [0065] an enlarged size in the main display area), contracting (e.g., in [0131] teaches the image reduction or magnification rate), and rotating an image (e.g., in [0072] teaches turning 90 degrees).

Tsai at [0032] teaches computing distribution ratios (shown in fig. 3 step 250) of the pixels in the line art space, the gray-level space and the colors space for each image square.

The Examiner interprets the last part lines 15-18 of the claimed invention, as follows: *an image processing section adjusts the distribution ratio of the noticing area in the template*

according to the method, which is designated by the trimming rule designating section. The claimed invention lines 15-18 recited: an image processing section for enlarging, contracting, and rotating the image, the trimming scope, and the template so as to adjust the distribution ratio of the noticing area in the trimming scope or the template according to the method which is designated by the trimming rule designating section.

Thus, it would have been obvious to a person skill in the art at the time of the invention to combine Janko into Tsai's computing distribution ratio and Kusunoki's invention because, this combination would provide attentional maps or noticing areas in objective measurement of video signal degradation that emphasize those portions of the video signal that are subjectively important to an observer.

Claim 2.

Kusunoki at [0122] teaches that an operator may adjust the position of the inner frame with the background image or as claim's feature recited, center aligning section for aligning a center of the noticing area and a center of the trimming scope or a center of the template.

Claim 3.

Kusunoki in figs. 10 illustrates the center of the noticing area is a crossing point of diagonal lines of a rectangle which surrounds the noticing area; and the center of the template is a crossing point of diagonal lines of a rectangle which surrounds the template.

Claim 4.

Kusunoki does not explicitly specify a noticing area threshold section which determines a threshold with reference to the noticing area having the highest noticing degree and determines

the noticing area having the noticing degree which is higher than the threshold when the noticing area is calculated by the noticing area calculating section.

However, Tsai at [0032] teaches step 230 in fig. 3 separates a colors coordinate into line art space, gray-level space and colors space. In step 240 cuts the preliminary colors image into several image squares (see specification on page 10 lines 5-6) in an orthogonal way.

Claim 5.

Kusunoki at [0002] teaches an image editing device for trimming an image, that relates to an image system for forming an image on the basis of image data entered into imaging system. Kusunoki at [0113] teaches a noticing area calculating section (i.e. the display area 88 shown in fig. 6) that calculates a noticing area of an image which is an object for a trimming operation

Kusunoki and Tsai do not explicitly specify the calculation of the noticing area being at least partially based on at least one noticing degree parameter of the image;

However, Janko in fig. 1B illustrates the calculation of the noticing area (i.e. similar to #18) being at least partially based on at least one noticing degree parameter of the image (i.e. similarly 10A, also in col. 4 lines 19-27, the noticing area is similarly as Janko disclosed it in his work as attentional maps).

Kusunoki in fig. 6 teaches a trimming rule designating section (i.e. the display area designated with number 38) for designating a trimming method for trimming the noticing area of the image which is the object for the trimming operation (i.e. in display area of 88). Kusunoki at [0089] and in figs. 10 teaches a trimming shape designating section for designating an arbitrary shape (Kusunoki at [0091] teaches selection of different templates in a reduce size) an arbitrary of a trimming scope when the designating operation of the trimming scope is selected by the

trimming rule designating section. Kusunoki at [0110] teaches the image data and the templates data are stored which is used for the trimming operation among a template group which is memorized in advance when a using operation for the template is designated by the trimming rule designating section. Kusunoki at [0092] teaches reducing or enlarging the template or the crop boundary 83 see Kusunoki's Fig. 4 for enlarging, contracting, and rotating the image Kusunoki in fig. 6 48a illustrates rotating an image, the trimming scope, and the template so as to adjust the distribution ratio of the noticing area in the trimming scope or the template according to the method which is designated by the trimming rule designating section. Kusunoki at [0122] teaches that the operator may adjust the first display area 38 to have a new aspect ratio corresponding to the aspect ratio of the template 84, but

Kusunoki does not explicitly specify (*see underlined features*) a noticing area (i.e. the first display area 38) error calculating section (*Examiner interpreted it as an adjusting section not as an error calculating section*) that calculates a distribution ratio of the noticing area in the trimming scope or the template (i.e. the template 84).

Tsai at [0032] teaches computing distribution ratios (shown in fig. 3 step 250) of the pixels in the line art space, the gray-level space and the colors space for each image square.

The Examiner's interpretation the claimed invention, as follows: *an image processing section adjusts the distribution ratio of the noticing area in the template according to the method, which is designated by the trimming rule designating section.*

Thus, it would have been obvious to a person skill in the art at the time of the invention to combine Janko into Tsai's computing distribution ratio and Kusunoki's invention because, this combination would provide attentional maps or noticing areas in objective measurement of video

signal degradation that emphasize those portions of the video signal that are subjectively important to an observer.

Claim 6.

Kusunoki at [0002] teaches an image editing device for trimming an image, that relates to an image system for forming an image on the basis of image data entered into imaging system. Kusunoki at [0113] teaches a noticing area calculating section (i.e. the display area 88 shown in fig. 6) that calculates a noticing area of an image which is an object for a trimming operation

Kusunoki and Tsai do not explicitly specify the calculation of the noticing area being at least partially based on at least one noticing degree parameter of the image;

However, Janko in fig. 1B illustrates the calculation of the noticing area (i.e. similar to #18) being at least partially based on at least one noticing degree parameter of the image (i.e. similarly 10A, also in col. 4 lines 19-27, the noticing area is similarly as Janko disclosed it in his work as attentional maps).

Kusunoki in fig. 6 teaches a trimming rule designating section (i.e. the display area designated with number 38) for designating a trimming method for trimming the noticing area of the image which is the object for the trimming operation (i.e. in display area of 88). Kusunoki at [0089] and in figs. 10 teaches a trimming shape designating section for designating an arbitrary shape (Kusunoki at [0091] teaches selection of different templates in a reduce size) an arbitrary of a trimming scope when the designating operation of the trimming scope is selected by the trimming rule designating section. Kusunoki at [0110] teaches the image data and the templates data are stored which is used for the trimming operation among a template group which is memorized in advance when a using operation for the template is designated by the trimming

rule designating section. Kusunoki at [0092] teaches reducing or enlarging the template or the crop boundary 83 see Kusunoki's Fig. 4 for enlarging, contracting, and rotating the image Kusunoki in fig. 6 48a illustrates rotating an image, the trimming scope, and the template so as to adjust the distribution ratio of the noticing area in the trimming scope or the template according to the method which is designated by the trimming rule designating section. Kusunoki at [0122] teaches that the operator may adjust the first display area 38 to have a new aspect ratio corresponding to the aspect ratio of the template 84, but

Kusunoki does not explicitly specify (*see underlined features*) a noticing area (i.e. the first display area 38) error calculating section (*Examiner interpreted it as an adjusting section not as an error calculating section*) that calculates a distribution ratio of the noticing area in the trimming scope or the template (i.e. the template 84).

Tsai at [0032] teaches computing distribution ratios (shown in fig. 3 step 250) of the pixels in the line art space, the gray-level space and the colors space for each image square.

The Examiner's interpretation the claimed invention, as follows: *an image processing section adjusts the distribution ratio of the noticing area in the template according to the method, which is designated by the trimming rule designating section.*

Thus, it would have been obvious to a person skill in the art at the time of the invention to combine Janko into Tsai's computing distribution ratio and Kusunoki's invention because, this combination would provide attentional maps or noticing areas in objective measurement of video signal degradation that emphasize those portions of the video signal that are subjectively important to an observer.

Claim 7.

Kusunoki does not explicitly specify a noticing area threshold section, which determines a threshold with reference to the noticing area having the highest noticing degree, and determines the noticing area having the noticing degree, which is higher than the threshold when the noticing area is calculated, by the noticing area calculating section.

However, Tsai at [0032] teaches step 230 in fig. 3 separates a colors coordinate into line art space, gray-level space and colors space. In step 240 cuts the preliminary colors image into several image squares (see specification on page 10 lines 5-6) in an orthogonal way.

Thus, it would have been obvious to a person skill in the art at the time of the invention to combine Janko into Tsai's computing distribution ratio and Kusunoki's invention because, this combination would provide attentional maps or noticing areas in objective measurement of video signal degradation that emphasize those portions of the video signal that are subjectively important to an observer.

Claim 8.

Kusunoki in figs. 10 illustrates the center of the noticing area is a crossing point of diagonal lines of a rectangle which surrounds the noticing area; and the center of the template is a crossing point of diagonal lines of a rectangle which surrounds the template.

Kusunoki does not explicitly specify a noticing area threshold section, which determines a threshold with reference to the noticing area having the highest noticing degree, and determines the noticing area having the noticing degree, which is higher than the threshold when the noticing area is calculated, by the noticing area calculating section.

However, Tsai at [0032] teaches step 230 in fig. 3 separates a colors coordinate into line art space, gray-level space and colors space. In step 240 cuts the preliminary colors image into several image squares (see specification on page 10 lines 5-6) in an orthogonal way.

Thus, it would have been obvious to a person skill in the art at the time of the invention to combine Tsai's computing distribution ratio into Kusunoki's invention in order to minimize the requires less memory and a shorter processing time.

Claims 9-12 are rejected with similar reason as set forth in claim 1, above.

Regarding claim 13, the noticing degree parameter is taught by Janko as an attentional map, see the abstract.

Regarding claim 14, the physical feature is taught by Janko in col. 4 lines 9-27, and see in fig. 1B.

Regarding claim 15, separating the image into a plurality of areas, is taught by Janko in fig. 1 B the image is 10A and the areas are 16A, 18 and 14A.

Regarding claim 16, see rejection of claim 14. Regarding claim 17, is rejected with similar reasons as set forth in claim 15, above. Claim 18 is rejected with similar reason as set forth in claim 14 above.

Regarding claims 19, and 20, use a terminology of "calculated automatically", it would have been obvious to an ordinary skill in the art to realize that an algorithm or a formula can be written in computer format (i.e. a program) to calculate the process automatically (Janko in col. 1 lines 51-54), remember the program is written by a user.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAVID A. AMINI whose telephone number is (571)272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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